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PictureTel 680 Overview



PictureTel 680 Overview



Operating System: Windows 2000

Processor: Celeron 566 Memory: 128 MB RAM

Connectivity: Quad-BRI and 10/100

interfaces

Supports: H.323, H.320, T.120

Voice Tracking Pan, Tilt, and Zoom (PTZ)

camera

Starting the Collaboration Application

The PictureTel collaboration system automatically starts upon user login. The system will display a splash screen indicating the system is auto-callibrating. Depending on the system state, prior to logging in, the PictureTel iPower theme may be heard.

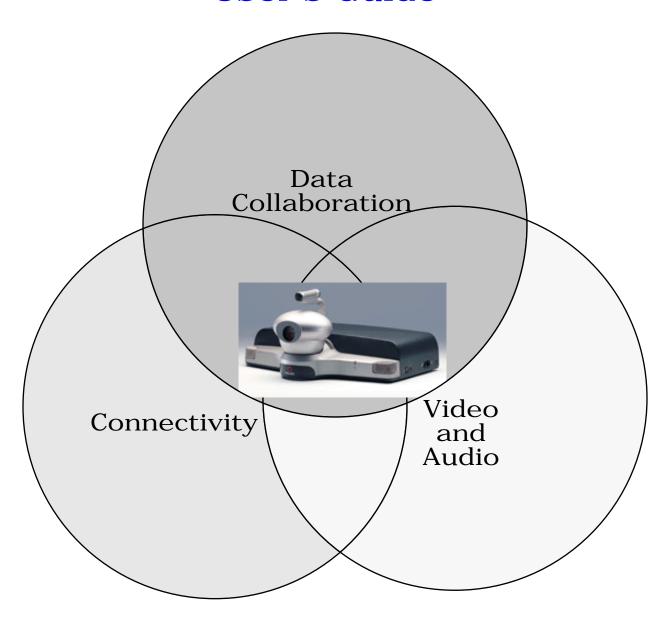
If the collaboration application is closed by accident or fails to execute upon login, the application may be started by:

- 1) clicking the start button
- 2) selecting the PictureTel icon named "Collaboration" (right)



PictureTel 680

CENTRE
Business Products, Inc.



Integration of data collaboration, video and audio, and connectivity identifies the PictureTel 680 as the best portable (set-top) videoconferencing appliance on the market today.



Controlling the PictureTel 680



Controlling the PictureTel 680

The PictureTel 680 can be controlled with the infrared remote or wireless keyboard and GUI (Graphic User-Interface, pronounced goo-ey). The chart below relates the remote buttons to the wireless keyboard and GUI.

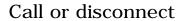
PictureTel GUI

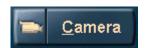
Remote

Function











Control pan, tilt, and zoom of the camera





Menu controls





Volume control





Mute audio (GUI shown with mute on)



Controlling the PictureTel 680

PictureTel GUI

Remote

Function







Hide the GUI far end shown full screen

Enable voice tracking (Auto-point)



Understanding People + Content



Understanding People + Content

The PictureTel 680 GUI and keyboard or GUI and remote permit the selection of two types of videoconferencing objects: People or Content. The People+Content concept is an integral component of PictureTel's iPower Platform. The People+Content model allows the local endpoint the ability to maintain constant view of the far-end video stream while application sharing or collaborating on a document

(The PictureTel 680 supports dual monitor configuration which enhances

People+Content).

People

People refers to any camera input that provides a video stream used in the videoconferencing call. Simply put, cameras used to view "people" are referenced as people items.

Content

Content denotes any input that is not affiliated with tracking the near end.

Content commonly includes: VCRs, DVD players, document cameras (visual presenters), or shared applications or documents.





When an item is available, it appears in the GUI. In the example (above), the PictureTel 680 camera, PT680, is the only item available.



Placing a Call



Placing a call



Make a Call GUI



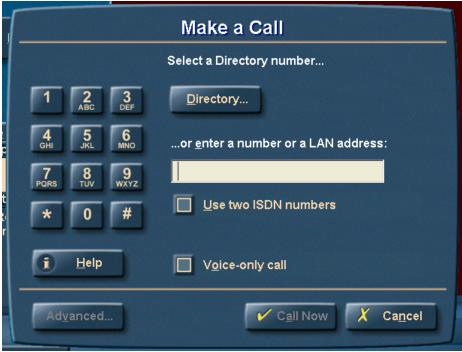
Remote buttons

A call is made by selecting the "Make a Call" GUI button or the "CALL/ANSWER" remote button.

The PictureTel 680 displays the dialing dialog. Users may place a call by selecting a previously dialed number from the diretory, typing the number with the keyboard, or using the remote's number pad.

Note: The dot in TCP/IP dialing is obtained by using the right arrow key. To commence dialing, the user must: click the "Call Now" button or the check button (below).





PictureTel 680

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Placing a call

0:00



Once a call is negotiated, the GUI's call status bar (CSB) is displayed. Several key features are noted by the status bar.

Duration of the call is viewed on the left-hand portion of the CSB, 0:00 in the above example.

The green "camera," located in the right hand portion of the CSB, appears if the Auto-point (voice tracking) is enabled. The arrow pointing down indicates that Auto-point is enabled on the near or local end. When auto-point is enabled on the far end, a green "camera" with an arrow pointing up will appear.

The "networked letter," also located in the right hand portion of the CSB, denotes that the T.120 protocol is enabled. T.120 is the protocol which allows application sharing, document collaboration, file transfers, whiteboard sharing, and chatting.



Adding a Document



Adding a Document

Pre-loading or loading documents on the fly

The PictureTel software permits the loading of documents before a VTC call is made. During the course of the call, a document may

be selected at any time. A document or application may also be "loaded on the fly."

T.120 must be enabled

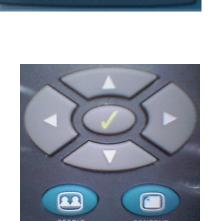
The T.120 protocol must be enabled in order to conduct application sharing or data collaboration.

If the "networked lettter" icon in the CSB (Call Status Bar), is not shown, then application sharing and data collaboration will fail.

If T.120 is enabled

The first step in sharing a document is selecting the "Add or Remove Documents" button located on the GUI in the the Content section. This can be achieved by using the wireless keyboard or the infrared remote.

When using the remote, press the blue "Content" button and then use the down arrow button to highlight "Add or Remove Documents." Next, press the "Check" button.



People and Content

💶 People

Content

Documents

Add or Remove

PT680

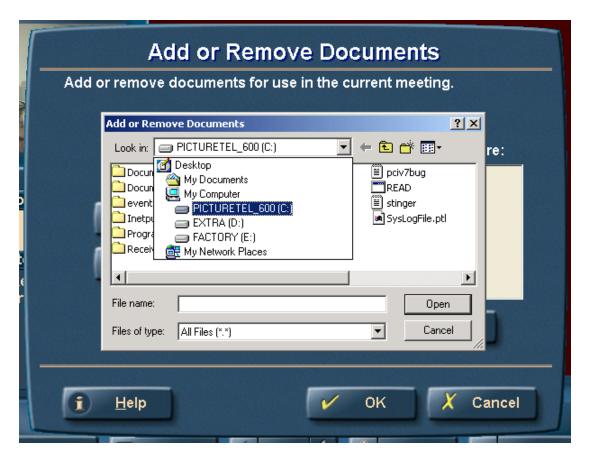


The PictureTel 680 prompts the user with the dialog box on the right. At this point, a user may choose to scan the local hard drive for a file to share, "Hard Drive (C:)" or a networked drive, "Browse..." button





The user is then prompted with a file/directory list box which enables the browsing of files and folders. The user selects the file they would like to share.





The PictureTel interface then displays the user's selection. To accept the selection, click the "Ok" button or the check mark on the remote. To cancel the file selection, select the "Cancel" or X-button on the remote.

After "approving" a document, the file will appear in the Content listing of the People+Content menu.

To display the document, select its name from the Content list.





Point to Point vs. Multi-Point Calls



Network Topology

In order to understand Point to Point vs. Multi-Point videoconferencing calls, basic network topologies must be observed. Discussion of network topologies does not reflect common connectivity methods which include: TCP/IP only, ISDN only, or a combination of TCP/IP and ISDN.

Point to Point



One to One

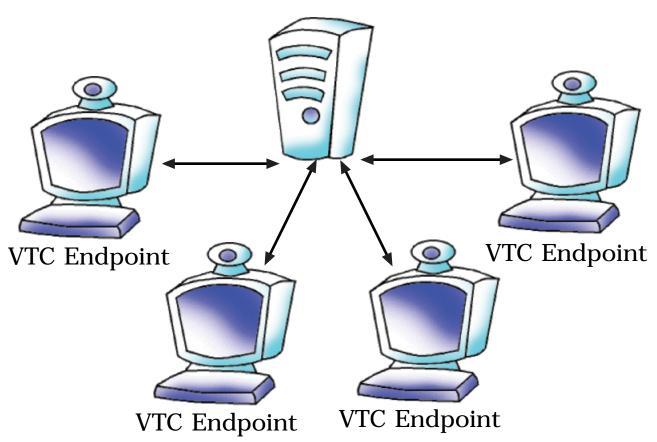
Point to Point network topology denotes one videoconferencing endpoint calling another, a one to one relationship.

P2P vs. Multi-Pt



Multi-Point

Multi-Point Control Unit



One to Many

Multi-Point network topology represents a one to many scenario. A device called a Multi-Point Control Unit allows several end points to participate in a call simultaneously. Multi-point is analogous to a POTS (Plain Old Telephone System) conference call.

P2P vs. Multi-Pt



USAWC Network Overview



USAWC VTC Roll Call





Conference Server 5.0



VTC Endpoint



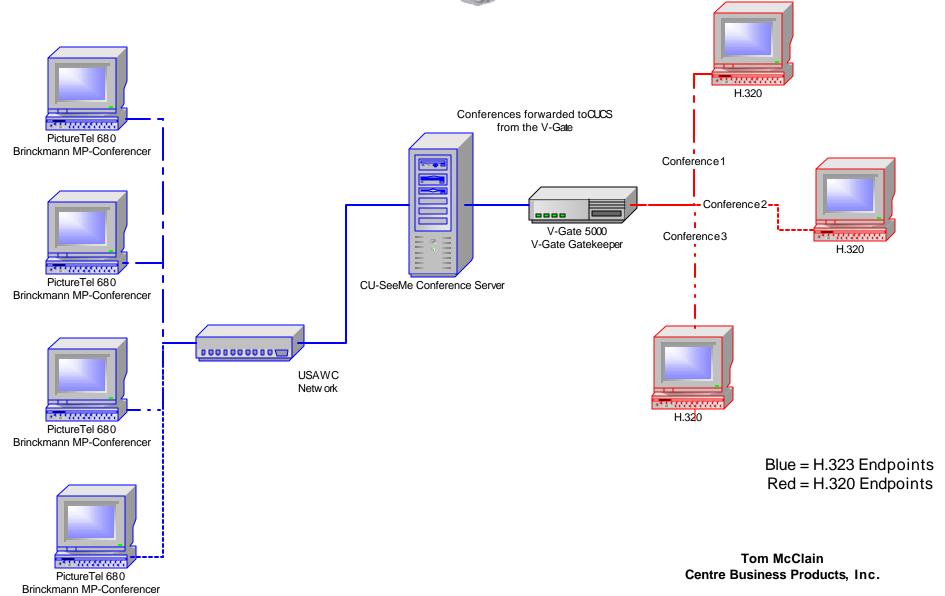
PictureTel 680

The USAWC VTC network correlates to the multi-point topology. A CU-SeeMe Conference Server (CUCS) functions as the multi-point control unit. PictureTel 680's serve as the main VTC Endpoints.

The USAWC VTC Network design allows an ISDN VTC system the ability to dial into a multi-point call via a gateway. Connectivity methods available in this scenario include: TCP/IP only or TCP/IP to ISDN. The PictureTel 680's are capable of dialing ISDN to ISDN through the integrated BRI cards. This entails connecting the units to pre-existing BRI lines.

USAWC Network Overview





Brinckmann and Associates' MP-Conferencer Overview



Brinckmann and Associates' MP-Conferencer Overview

Most MCUs (Multi-Point Control Unit) allow server side control and management of conference calls. The CUCS is no exception. This functionality is useful if a technician is available to monitor conferences and ensure the appropriate video stream is reached by the H.323 end points



For most IT departments, having a technician on-call 24-7 is not a viable option.

Conference Server 5.0



Brinckmann and Associates, Inc.

See who you want to see, when you want to see them!



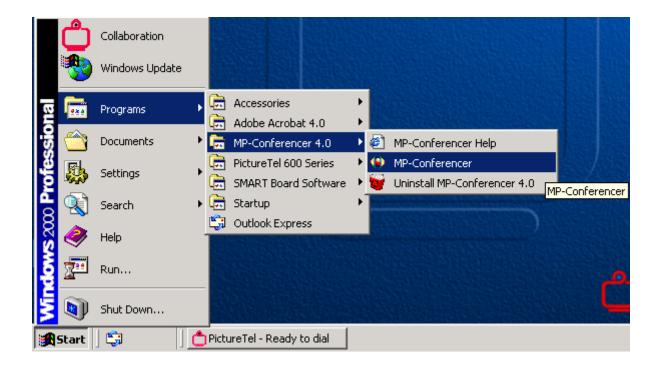
Brinckmann and Associates Inc.'s MP-Conferencer works in conjunction with a CUCS and provides the end user with control of which video stream they are seeing. Two of the more attractive features of the MP-Conferencer are the capability of inviting H.323 end points into a conference call and the ability to moderate VTC calls.

Brinckmann



Using the MP-Conferencer





The MP-Conferencer is started by selecting the application from the program menu (above) or double clicking the desktop (below).



MP-Conferencer



The Name/Location of the VTC unit is shown in the combo box labeled "NAME/LOCATION." In the example above, "VIGO-TMCCLAIN" identifies the machine name. The state of the MP-Conferencer is denoted by the light appears below the reset button. If the light is:



Green - the application has located the server and is ready to dial

Yellow - network traffic has slowed negotiation with CUCS. Please click the "RESET" button.

Red - the CUCS has not been located. Please contact the system administrator.

An end user selects the multipoint call button from the initial interface to place a call with the MP-Conferencer.



MP-Conferencer





After selecting the multipoint call button, a list of available conferences will be presented to the end user. In the image to the left, 5 conferences are available. An end user selects one of the conferences.

Once the call is negotiated, a listing of current users is viewed. The interface, below, shows a single user, "VIGO-TMCCLAIN," in the call. In order to view a specific videostream, an end user simply selects the "button" corresponding to the name of the individual's VTC-unit.

Please note: The ability to move from Continuous Presence (Hollywood Squares) to a Single Presence video stream and then back to a continuous presence screen is not a part of the H.323 standard. Many VTC systems support this functionality however, the PictureTel 680's do not. If Continuous Presence is needed in a VTC call, end users are strongly encouraged to use the continuous presence layout only and not attempt to switch video streams.



MP-Conferencer

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The participant list occupies roughly 2/3 of the "in call interface." The bottom 1/3 of the interface consists of the conference controls.

VOICE/CP - allows an end point's video streams to be arranged in continuous presence or "hollywood squares" fashion. If continuous presence is not enabled for a call, the active voice's video stream will be shown.

TOUCH/SP - allows end points to be shown in single presence mode. End users view a video stream by clicking the appropriate site name in the participant list.



TIME - allows each video stream to be displayed for a predefined interval. The interval is set by right clicking on the "TIME" button and then adjusting the interval.

A/V LOCK - works in conjunction with the moderate feature. This option locks out the audio and video of a particular end point.

MP-Conferencer





INVITE - allows a VTC unit to be remotely included in a conference. Clicking the "INVITE" button returns the available participants in the participant list. The grey indicator denotes a user is available for the conference. A green indicator denotes the participant is currently in a call.

MP-Conferencer

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MODERATE - After selecting the "MODERATE" button, the options below appear in the control console portion of the MP-Conferencer. A moderator may opt to enable hand raising, the selection of multiple end points, or all only audio from the participants.



The control console for the moderated participants is reduced to three options: more, raise hand, and hang up. Checking the raise hand button notifies the moderator that a participant wishes to address the conference.



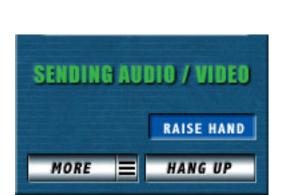
MP-Conferencer



After a participant clicks the "RAISE HAND" button, the moderator is prompted with a "Raised Hands" dialog.







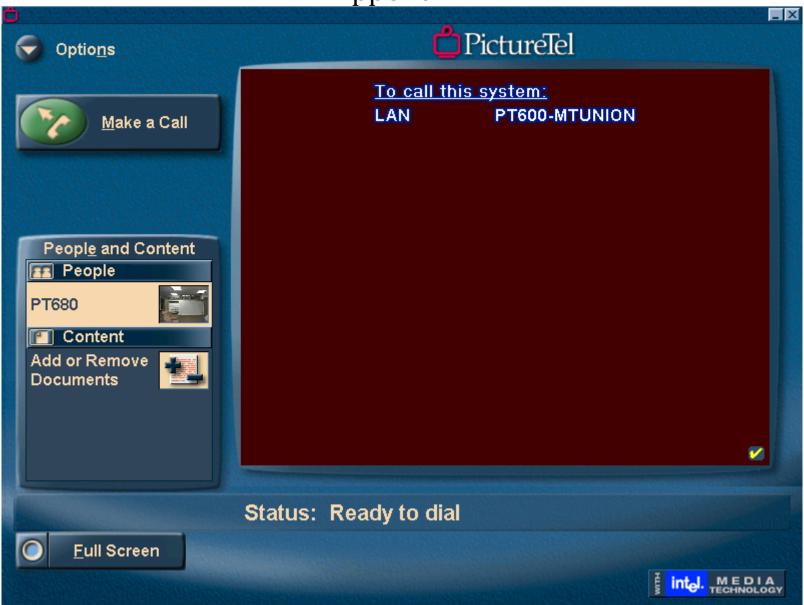
The "SENDING AUDIO/VIDEO" banner is diskplay on the MP-Conferencer's interface when the moderator grants the end point the floor.

MP-Conferencer





Appendix



PictureTel 680 Interface